### Claim Listing

# 1-24 (canceled)

25. (previously presented) A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to formula (Vb):

$$\begin{array}{c|c}
R^4 & N \\
N & N \\
N$$

 $R^{1}$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfinylalkyl, alkylsulfonylalkyl, alkynyl, aryl, arylalkenyl, arylalkenyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkyl) alkyl, formylalkyl, haloalkoxyalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl,  $R_aR_bN$ -,  $R_aR_bN$ alkyl-,  $R_aR_bNC(O)$ alkyl-

R<sup>4</sup> is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy, R<sub>a</sub>R<sub>b</sub>N-, N<sub>3</sub>-, and R<sub>e</sub>S-, wherein R<sup>4</sup> is substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano, -OH, -NH<sub>2</sub>, and -COOH;

 $R^5$  is selected from the group consisting of  $R_aSO_2N(R_f)$ -,  $R_aSO_2N(R_f)$ alkyl-,  $R_aR_bNSO_2N(R_f)$ -, and  $R_aR_bNSO_2N(R_f)$ alkyl-;

 $R^6$  is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl, -(alkyl)( $OR_k$ ), -(alkyl)( $NR_aR_b$ ), - $SR_a$ , - $S(O)R_a$ , - $S(O)_2R_a$ , - $OR_k$ , - $N(R_a)(R_b)$ , - $C(O)R_a$ , - $C(O)OR_a$ , and - $C(O)NR_aR_b$ , wherein each  $R^6$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano,

nitro, -OR<sub>a</sub>, -NR<sub>a</sub>R<sub>b</sub>, -SR<sub>a</sub>, -SOR<sub>a</sub>, -SO<sub>2</sub>R<sub>a</sub>, -C(O)OR<sub>a</sub>, -C(O)NR<sub>a</sub>R<sub>b</sub>, and -NC(O)R<sub>a</sub>;

 $R_a$  and  $R_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkenyl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl,  $R_cR_dN_c$ ,  $R_cR_dN_c$ ,

alternatively, R<sub>a</sub> and R<sub>b</sub>, together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -alkylSO<sub>2</sub>NR<sub>c</sub>R<sub>d</sub>, -alkylC(O)NR<sub>c</sub>R<sub>d</sub>, -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub>, and -C(O)NR<sub>c</sub>R<sub>d</sub>;

 $R_c$  and  $R_d$ , at each occurrence, are independently selected from the group consisting of hydrogen, -NR<sub>f</sub>R<sub>h</sub>, -OR<sub>f</sub>, -CO(R<sub>f</sub>), -SR<sub>f</sub>, -SOR<sub>f</sub>, -SO<sub>2</sub>R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -C(O)OR<sub>f</sub>, alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocycloalkyl, wherein each  $R_c$  and  $R_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)R<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)R<sub>f</sub>, -C(O)OR<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -C(O)N(H)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)OR<sub>f</sub>, -N(R<sub>e</sub>)SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>,

alternatively,  $R_c$  and  $R_d$ , together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)OR<sub>f</sub>, and -C(O)NR<sub>f</sub>R<sub>h</sub>;

R<sub>e</sub> is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl:

 $R_f$ ,  $R_g$ , and  $R_h$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroarylalkyl, and heteroarylalkyl, wherein each  $R_f$ ,  $R_g$ , and  $R_h$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -N(+)(alkyl), -N(alkyl), -S(alkyl), -S(O)(alkyl), -SO2alkyl, -alkyl-O+alkyl, -alkylNH2, -alkylN(H)(alkyl), -alkylN(alkyl)2, -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO2alkyl, -N(H)C(O)NH2, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH2, -C(O)N(H)(alkyl), and -C(O)N(alkyl)2;

alternatively, R<sub>f</sub> and R<sub>g</sub>, together with the carbon atom to which they are attached, form a threeto seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl, and heterocycle;

alternatively, R<sub>f</sub> and R<sub>h</sub>, together with the nitrogen atom to which they are attached form a three-to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

 $R_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $R_aR_bNalkyl$ -,  $R_aOalkyl$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aSO_2$ -,  $R_aSalkyl$ -,  $R_a(O)$ -Salkyl-,  $R_aSO_2$ alkyl-,  $R_aOC(O)$ -,  $R_aOC(O)$ -, and  $R_aC(O)$ -, wherein each  $R_k$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)( $OR_c$ ), -(alkyl)( $NR_cR_d$ ), - $SR_c$ , - $S(O)R_c$ , - $S(O)_2R_c$ , - $OR_c$ , - $N(R_c)(R_d)$ , - $C(O)R_c$ , - $C(O)OR_c$ , and - $C(O)NR_cR_d$ ; and

m is 0, 1, 2, 3, or 4.

26. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 25, wherein R<sup>4</sup> is hydroxy.

- 27. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 26, wherein  $R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkynyl, arylalkenyl, arylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkenyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl,  $R_aR_bN$ -,  $R_aR_bN$ alkyl-,  $R_aR_bNC(O)$ alkyl-,  $R_iR_oC$ =N-, and  $R_kO$ -.
- 28. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 25, wherein the compound is selected from the group consisting of:
- N-{[3-(1-benzyl-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl)-1,1-dioxido-4H-thieno[2,3-e][1,2,4] thiadiazin-7-yl]methyl}methanesulfonamide;
- N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]methanesulfonamide;
- N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]ethanesulfonamide;
- N-[(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]propane-1-sulfonamide;
- $N-[(3-\{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl\}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]propane-2-sulfonamide;$
- $N-[(3-\{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl\}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]benzenesulfonamide; and$
- $N-[(3-\{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl\}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]-1-phenylmethanesulfonamide.$

#### 29. (canceled)

**30.** (previously presented) A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to formula (VIa):

$$\begin{array}{c|c}
R^4 & N & S \\
\hline
N & N & S
\end{array}$$

$$\begin{array}{c|c}
R^5 & \text{(VIa)}
\end{array}$$

 $R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylsulfanylalkyl, alkylsulfanylalkyl, alkylsulfanylalkyl, alkylsulfanylalkyl, alkylsulfanylalkyl, alkylsulfanylalkyl, arylsulfanylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenyl, cycloalkyl, cycloalkyl, cycloalkyl, cycloalkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroarylalkenyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl,  $R_aR_bN-$ ,  $R_aR_bNalkyl-$ ,  $R_aR_bNC(O)alkyl-$ ,  $R_aR_bNC(O)alkyl-$ ,  $R_aR_bNC(O)NR_ealkyl-$ ,  $R_fR_gC=N-$ , and  $R_kO-$ , wherein  $R^1$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)( $OR_c$ ), -(alkyl)( $OR_c$ ), - $SR_c$ , - $SO(O)_2R_c$ , - $OR_c$ , - $OR_c$ , - $OR_c$ , - $OR_c$ ), - $OR_c$ 0, -OR

R<sup>4</sup> is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy, R<sub>a</sub>R<sub>b</sub>N-, N<sub>3</sub>-, and R<sub>e</sub>S-, wherein R<sup>4</sup> is substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano, -OH, -NH<sub>2</sub>, and -COOH;

 $R^5$  is selected from the group consisting of  $R_aSO_2N(R_f)$ -,  $R_aSO_2N(R_f)$ alkyl-,  $R_aR_bNSO_2N(R_f)$ -, and  $R_aR_bNSO_2N(R_f)$ alkyl-;

 $R^6$  is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl, -(alkyl)( $OR_k$ ), -(alkyl)( $NR_aR_b$ ), - $SR_a$ , - $S(O)R_a$ , - $S(O)_2R_a$ , - $OR_k$ , - $N(R_a)(R_b)$ , - $C(O)R_a$ , - $C(O)OR_a$ , and - $C(O)NR_aR_b$ , wherein each  $R^6$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro, - $OR_a$ , - $NR_aR_b$ , - $SR_a$ , - $SOR_a$ , - $SO_2R_a$ , - $C(O)OR_a$ , - $C(O)NR_aR_b$ , and - $NC(O)R_a$ ;

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl,

cycloalkenylalkyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heteroarylalkyl, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl,  $R_cR_dN$ -,  $R_cR_dN$ alkyl-,  $R_cR_dN$ C(O)alkyl-,  $R_cSO_2$ -,  $R_cSO_2$ alkyl-,  $R_cC(O)$ -,  $R_cC(O)$ alkyl-,  $R_cOC(O)$ -,  $R_cC(O)$ alkyl-,  $R_cR_dN$ C(O)-,  $R_cR_dN$ C(O)-,  $R_cR_dN$ C(O)-,  $R_cR_dN$ C(O)-,  $R_cR_dN$ C(O)-,  $R_cR_dN$ C(O)-, and  $R_cR_dN$ C(O)N( $R_c$ )alkyl-, wherein  $R_a$  and  $R_b$  are substituted with 0, 1, or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(O $R_c$ ), -(alkyl)(N $R_cR_d$ ), -S $R_c$ , -S(O) $R_c$ , -S(O) $R_c$ , -O $R_c$ , -N( $R_c$ )( $R_d$ ), -C(O) $R_c$ , -C(O)O $R_c$ , and -C(O)N $R_cR_d$ ;

alternatively, R<sub>a</sub> and R<sub>b</sub>, together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -alkylSO<sub>2</sub>NR<sub>c</sub>R<sub>d</sub>, -alkylC(O)NR<sub>c</sub>R<sub>d</sub>, -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub>, and -C(O)NR<sub>c</sub>R<sub>d</sub>;

 $R_c$  and  $R_d$ , at each occurrence, are independently selected from the group consisting of hydrogen, -NR<sub>f</sub>R<sub>h</sub>, -OR<sub>f</sub>, -CO(R<sub>f</sub>), -SR<sub>f</sub>, -SOR<sub>f</sub>, -SO<sub>2</sub>R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -C(O)OR<sub>f</sub>, alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocycloalkyl, wherein each  $R_c$  and  $R_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)R<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)R<sub>f</sub>, -C(O)OR<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -C(O)N(H)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>c</sub>)C(O)OR<sub>f</sub>, -N(R<sub>c</sub>)SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>c</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>c</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -AlkylN(R<sub>c</sub>)C(O)OR<sub>f</sub>, -alkylN(R<sub>c</sub>)SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, and -alkylN(R<sub>c</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>;

alternatively,  $R_c$  and  $R_d$ , together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)OR<sub>f</sub>, and -C(O)NR<sub>f</sub>R<sub>h</sub>;

Re is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

R<sub>f</sub>, R<sub>g</sub>, and R<sub>h</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, aryl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenyl, cycloalkenyl, cycloalkyl,

heterocycle, heterocyclealkyl, heteroaryl, and heteroarylalkyl, wherein each  $R_f$ ,  $R_g$ , and  $R_h$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl),  $-NH_2$ , -N(H)(alkyl),  $-N(alkyl)_2$ , -S(alkyl), -S(O)(alkyl),  $-SO_2alkyl$ , -alkyl-OH, -alkyl-O-alkyl,  $-alkylNH_2$ , -alkylN(H)(alkyl),  $-alkylN(alkyl)_2$ , -alkylS(alkyl),  $-alkylSO_2alkyl$ ,  $-N(H)C(O)NH_2$ , -C(O)OH, -C(O)O(alkyl), -C(O)alkyl,  $-C(O)NH_2$ , -C(O)N(H)(alkyl), and  $-C(O)N(alkyl)_2$ ;

alternatively, R<sub>f</sub> and R<sub>g</sub>, together with the carbon atom to which they are attached, form a threeto seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl, and heterocycle;

alternatively, R<sub>f</sub> and R<sub>h</sub>, together with the nitrogen atom to which they are attached, form a three-to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

 $R_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $R_aR_bNalkyl$ -,  $R_aOalkyl$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aSO_2$ -,  $R_aSol_2$ -,  $R_aSo$ 

m is 0, 1, 2, 3, or 4.

- 31. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 30, wherein  $R^4$  is hydroxy.
- 32. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 31, wherein R<sup>1</sup> is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxyarbonylalkyl, alkyl, alkynyl, arylalkenyl, arylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl,

cycloalkylalkenyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroarylalkenyl, heteroarylalkyl, heterocyclealkyl, hydroxyalkyl,  $R_aR_bN$ -,  $R_aR_bN$ alkyl-,  $R_aR_bNC(O)$ alkyl-,  $R_fR_gC$ =N-, and  $R_kO$ -.

33. (previously presented) A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to formula (VIb):

$$\begin{array}{c|c}
R^4 & N & S & R^5 \\
\hline
R^6 & N & N & S & N & S
\end{array}$$
(VIb)

 $R^{\dagger}$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfanylalkyl, alkylsulfonylalkyl, alkylsulfonylalkyl, aryl, arylalkenyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkoxyalkyl, haloalkyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl,  $R_aR_bN-$ ,  $R_aR_bNalkyl-$ ,  $R_aR_bNC(O)$ alkyl-,  $R_aR_bNC(O)$ Oalkyl-,  $R_aR_bNC(O)$ NRcalkyl-,  $R_fR_gC=N-$ , and  $R_kO-$ , wherein  $R^1$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(ORc), -(alkyl)(NRcRc), -SRc, -S(O)Rc, -S(O)\_2Rc, -ORc, -N(Rc)(Rc), -C(O)Rc, -C(O)ORc, and -C(O)NRcRc;

 $R^4$  is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy,  $R_aR_bN_{-}$ ,  $N_3$ -, and  $R_eS_{-}$ , wherein  $R^4$  is substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano, -OH, -NH<sub>2</sub>, and -COOH;

 $R^{5} \ is \ selected \ from \ the \ group \ consisting \ of \ R_{a}SO_{2}N(R_{f})\text{-,} \ R_{a}SO_{2}N(R_{f})\text{-alkyl-,} \ R_{a}R_{b}NSO_{2}N(R_{f})\text{-,}$  and  $R_{a}R_{b}NSO_{2}N(R_{f})\text{alkyl-;}$ 

 $R^6$  is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl, -(alkyl)( $OR_k$ ), -(alkyl)( $NR_aR_b$ ), - $SR_a$ , - $S(O)R_a$ , - $S(O)_2R_a$ , - $OR_k$ , - $N(R_a)(R_b)$ , - $C(O)R_a$ , - $C(O)OR_a$ , and - $C(O)NR_aR_b$ , wherein each  $R^6$  is independently substituted with 0, 1, 2, or 3 substituents

independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro, -OR<sub>a</sub>, -NR<sub>a</sub>R<sub>b</sub>, -SR<sub>a</sub>, -SO<sub>2</sub>R<sub>a</sub>, -C(O)OR<sub>a</sub>, -C(O)NR<sub>a</sub>R<sub>b</sub>, and -NC(O)R<sub>a</sub>;

 $R_a$  and  $R_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl,  $R_cR_dN$ -,  $R_cR_dN$ alkyl-,  $R_cR_dN$ C(O)alkyl-,  $R_cSO_2$ -,  $R_cSO_2$ alkyl-,  $R_cC(O)$ -,  $R_cC(O)$ alkyl-,  $R_cOC(O)$ -,  $R_cOC(O)$ -,  $R_cOC(O)$ -alkyl-,  $R_cR_dN$ alkylC(O)-,  $R_cR_dN$ C(O)-,  $R_cR_dN$ C(O)Oalkyl-, and  $R_cR_dN$ C(O)N( $R_c$ )alkyl-, wherein  $R_a$  and  $R_b$  are substituted with 0, 1, or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(O $R_c$ ), -(alkyl)(N $R_c$ R<sub>d</sub>), -S $R_c$ , -S(O) $R_c$ , -S(O) $R_c$ , -O $R_c$ , -N( $R_c$ )( $R_d$ ), -C(O) $R_c$ , -C(O)O $R_c$ , and -C(O)N $R_c$ R<sub>d</sub>;

alternatively, R<sub>a</sub> and R<sub>b</sub>, together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -alkylSO<sub>2</sub>NR<sub>c</sub>R<sub>d</sub>, -alkylC(O)NR<sub>c</sub>R<sub>d</sub>, -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub>, and -C(O)NR<sub>c</sub>R<sub>d</sub>;

 $R_e$  and  $R_d$ , at each occurrence, are independently selected from the group consisting of hydrogen, -NR<sub>f</sub>R<sub>h</sub>, -OR<sub>f</sub>, -CO(R<sub>f</sub>), -SR<sub>f</sub>, -SOR<sub>f</sub>, -SO<sub>2</sub>R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -C(O)OR<sub>f</sub>, alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocycloalkyl, wherein each  $R_e$  and  $R_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)R<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -C(O)N(H)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)OR<sub>f</sub>, -N(R<sub>e</sub>)SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>e</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>,

alternatively, R<sub>c</sub> and R<sub>d</sub>, together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>),

-(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)R<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)R<sub>f</sub>, -C(O)OR<sub>f</sub>, and -C(O)NR<sub>f</sub>R<sub>h</sub>; R<sub>e</sub> is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

 $R_{\rm f}, R_{\rm g}$ , and  $R_{\rm h}$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl, and heteroarylalkyl, wherein each  $R_{\rm f}, R_{\rm g}$ , and  $R_{\rm h}$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -N(H)(alkyl),  $-N(alkyl)_2$ , -S(alkyl), -S(O)(alkyl),  $-SO_2alkyl$ , -alkyl-OH, -alkyl-O-alkyl,  $-alkylNH_2$ , -alkylN(H)(alkyl),  $-alkylN(alkyl)_2$ , -alkylS(alkyl), -alkylS(O)(alkyl),  $-alkylSO_2alkyl$ ,  $-N(H)C(O)NH_2$ , -C(O)OH, -C(O)O(alkyl), -C(O)alkyl,  $-C(O)NH_2$ , -C(O)N(H)(alkyl), and  $-C(O)N(alkyl)_2$ ;

alternatively,  $R_f$  and  $R_g$ , together with the carbon atom to which they are attached, form a three-to seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl, and heterocycle;

alternatively,  $R_f$  and  $R_h$ , together with the nitrogen atom to which they are attached, form a three-to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

 $R_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $R_aR_bNalkyl$ -,  $R_aOalkyl$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aSO_2$ -,  $R_aSalkyl$ -,  $R_a(O)$ -Salkyl-,  $R_aSO_2$ -alkyl-,  $R_aOC(O)$ -,  $R_aOC(O)$ -, and  $R_aC(O)$ -, wherein each  $R_k$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)( $OR_c$ ), -(alkyl)( $OR_c$ ), -(alkyl)( $OR_c$ ), -S(O) $OR_c$ , -S(O) $OR_c$ , -ORC, -ORC, -N( $OR_c$ )( $OR_c$ ), -C( $OR_c$ , -C( $OR_c$ ) and -C( $OR_c$ ) and

m is 0, 1, 2, 3, or 4.

34. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 33, wherein R<sup>4</sup> is hydroxy.

35. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 34, wherein  $R^1$  is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkynyl, arylalkenyl, arylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkenylalkyl, cycloalkyl, cycloalkylalkenyl, cycloalkylalkyl, haloalkyl, heteroarylalkenyl, heteroarylalkyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl,  $R_aR_bN$ -,  $R_aR_bN$ alkyl-,  $R_aR_bNC(O)$ alkyl-,  $R_dR_gC$ =N-, and  $R_kO$ -.

## 36-51. (canceled)

52. (previously presented) A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to formula (VIII):

$$\begin{array}{c|c}
R^{3} & & \\
R^{3} & & \\
R^{2} & & \\
R^{1} & & \\
\end{array}$$
(VIII)

X is NH, N(alkyl), O, or S;

R¹ is selected from the group consisting of hydrogen, alkenyl, alkoxyalkyl, alkoxycarbonylalkyl, alkyl, alkylcarbonylalkyl, alkylsulfanylalkyl, alkylsulfanylalkyl, alkylsulfonylalkyl, alkylsulfonylalkyl, aryl, arylalkenyl, arylalkyl, arylsulfanylalkyl, arylsulfonylalkyl, carboxyalkyl, cyanoalkyl, cycloalkenyl, cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, cycloalkyl, (cycloalkyl)alkenyl, (cycloalkyl)alkyl, formylalkyl, haloalkoxyalkyl, haloalkyl, heteroarylalkyl, heteroarylsulfonylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkyl, nitroalkyl, RaRbN-, RaRbNalkyl-, RaRbNC(O)alkyl-, RaRbNC(O)Oalkyl-, RaRbNC(O)Oalkyl-, RaRbNC(O)NRcalkyl-, RaRc=N-a and RkO-, wherein R¹ is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(ORc), -(alkyl)(NRcRe), -SRc, -S(O)Rc, -S(O)2Rc, -ORc, -N(Rc)(Re), -C(O)Rc, -C(O)ORc, and -C(O)NRcRe;

R<sup>2</sup> and R<sup>3</sup> are independently selected from the group consisting of hydrogen, alkenyl, alkynyl, alkoxyalkyl, alkoxyarbonyl, alkyl, aryl, arylalkyl, heteroaryl, heterocycle, heteroarylalkyl, cyano, halo,

-N( $R_a$ )( $R_b$ ),  $R_aR_b$ NC(O)-, -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, and  $R_a$ C(O)-, wherein  $R^2$  and  $R^3$  are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of  $R_a$ , alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, -(alkyl)(OR<sub>k</sub>), -(alkyl)(NR<sub>a</sub>R<sub>b</sub>), -SR<sub>a</sub>, -S(O)R<sub>a</sub>, -S(O)<sub>2</sub>R<sub>a</sub>, -OR<sub>k</sub>, -N(R<sub>a</sub>)(R<sub>b</sub>), -C(O)R<sub>a</sub>, -C(O)OR<sub>a</sub>, and -C(O)NR<sub>a</sub>R<sub>b</sub>;

alternatively, R<sup>2</sup> and R<sup>3</sup>, together with the carbon atoms to which they are attached, form a fiveor six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl, and heterocycle, wherein said aryl, cycloalkyl, heteroaryl, and heterocycle is optionally substituted with (R<sup>6</sup>)<sub>m</sub>;

 $R^4$  is selected from the group consisting of alkoxy, arylalkoxy, aryloxy, halo, hydroxy,  $R_aR_bN_{-}$ ,  $N_3$ -, and  $R_eS_{-}$ , wherein  $R^4$  is independently substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano, -OH, -NH<sub>2</sub>, and -COOH;

 $R^5$  is independently selected at each occurrence from the group consisting of alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydoxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $R_aR_bN$ -,  $R_aC(O)$ -,  $R_aS$ -,  $R_a(O)S$ -,  $R_a(O)_2S$ -,  $R_aR_bN$ alkyl-,  $R_a(O)SN(R_f)$ -,  $R_aSO_2N(R_f)$ -,  $R_aC(O)$ -,  $R_aSO_2N(R_f)$ -,  $R_aR_bNSO_2N(R_f)$ -,  $R_aR_bNSO_2N(R_f)$ -,  $R_aR_bNSO_2N(R_f)$ -,  $R_aR_bNSO_2N(R_f)$ -,  $R_aR_bNSO_2N(R_f)$ -,  $R_aR_bNSO_2N(R_f)$ -, and  $R_aR_bNSO_2N(R_f)$ -, and an interval  $R_aR_bNSO_2N(R_f)$ -, and an interva

 $R^6$  is independently selected at each occurrence from the group consisting of alkyl, alkenyl, alkynyl, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, heterocyclealkyl, -(alkyl)( $OR_k$ ), -(alkyl)( $NR_aR_b$ ), - $SR_a$ , - $S(O)R_a$ , - $S(O)_2R_a$ , - $OR_k$ , - $N(R_a)(R_b)$ , - $C(O)R_a$ , - $C(O)OR_a$ , and - $C(O)NR_aR_b$ , wherein each  $R^6$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, haloalkyl, cyano, nitro, - $OR_a$ , - $NR_aR_b$ , - $SR_a$ , - $SO_2R_a$ , - $C(O)OR_a$ , - $C(O)NR_aR_b$ , and - $NC(O)R_a$ ;

 $R^7$  is independently selected at each occurrence from the group consisting of alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydoxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $R_aR_bN$ -,  $R_aC(O)$ -,  $R_aS$ -,  $R_a(O)S$ -,  $R_a(O)_2S$ -,  $R_aR_bNalkyl$ -,  $R_a(O)SN(R_f)$ -,  $R_aSO_2N(R_f)$ -,  $R_aSO_2N(R_f)$ -,  $R_aC(O)$ -,  $R_a$ 

of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub>, and -C(O)NR<sub>c</sub>R<sub>d</sub>;

 $R_a$  and  $R_b$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkenyl, cycloalkylalkyl, cycloalkylalkenyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, nitroalkyl,  $R_cR_dN$ -,  $R_cR_dN$ alkyl-,  $R_cR_dN$ C(O)alkyl-,  $R_cSO_2$ -,  $R_cSO_2$ alkyl-,  $R_cC(O)$ -,  $R_cC(O)$ alkyl-,  $R_cOC(O)$ -,  $R_cC(O)$ alkyl-,  $R_cR_dN$ C(O)-,  $R_cR_dN$ C(O)-,  $R_cR_dN$ C(O)Oalkyl-, and  $R_cR_dN$ C(O)N( $R_c$ )alkyl-, wherein  $R_a$  and  $R_b$  are substituted with 0, 1, or 2 substituents selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(O $R_c$ ), -(alkyl)(N $R_cR_d$ ), -S $R_c$ , -S(O) $R_c$ , -S(O) $R_c$ , -O $R_c$ , -N( $R_c$ )( $R_d$ ), -C(O) $R_c$ , -C(O)O $R_c$ , and -C(O)N $R_c$ R<sub>d</sub>;

alternatively, R<sub>a</sub> and R<sub>b</sub>, together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>c</sub>), -(alkyl)(NR<sub>c</sub>R<sub>d</sub>), -alkylSO<sub>2</sub>NR<sub>c</sub>R<sub>d</sub>, -alkylC(O)NR<sub>c</sub>R<sub>d</sub>, -SR<sub>c</sub>, -S(O)R<sub>c</sub>, -S(O)<sub>2</sub>R<sub>c</sub>, -OR<sub>c</sub>, -N(R<sub>c</sub>)(R<sub>d</sub>), -C(O)R<sub>c</sub>, -C(O)OR<sub>c</sub>, and -C(O)NR<sub>c</sub>R<sub>d</sub>;

 $R_c$  and  $R_d$ , at each occurrence, are independently selected from the group consisting of hydrogen, -NR<sub>f</sub>R<sub>h</sub>, -OR<sub>f</sub>, -CO(R<sub>f</sub>), -SR<sub>f</sub>, -SOR<sub>f</sub>, -SO<sub>2</sub>R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -C(O)OR<sub>f</sub>, alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocyclealkyl; wherein each  $R_c$  and  $R_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)R<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -C(O)N(H)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>c</sub>)C(O)OR<sub>f</sub>, -N(R<sub>c</sub>)SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>c</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -alkylN(R<sub>c</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>;

alternatively, R<sub>c</sub> and R<sub>d</sub>, together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl,

 $\label{eq:constraints} haloalkoxy, aryl, heteroaryl, heteroarylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR_f), -(alkyl)(NR_fR_h), -SR_f, -S(O)R_f, -S(O)_2R_f, -OR_f, -N(R_f)(R_h), -C(O)R_f, -C(O)OR_f, and -C(O)NR_fR_h;$ 

Re is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

R<sub>f</sub>, R<sub>g</sub>, and R<sub>h</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroarylalakyl; wherein each R<sub>f</sub>, R<sub>g</sub>, and R<sub>h</sub> is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(O)(alkyl), -SO<sub>2</sub>alkyl, -alkyl-O+alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylN(alkyl)<sub>2</sub>, -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)alkyl, -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

alternatively, R<sub>f</sub> and R<sub>g</sub>, together with the carbon atom to which they are attached, form a threeto seven-membered ring selected from the group consisting of cycloalkyl, cycloalkenyl, and heterocycle;

alternatively, R<sub>f</sub> and R<sub>h</sub>, together with the nitrogen atom to which they are attached, form a three-to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl)<sub>2</sub>, -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

 $R_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $R_aR_b$ Nalkyl-,  $R_a$ Oalkyl-,  $R_aR_b$ NC(O)-,  $R_aR_b$ NC(O)alkyl,  $R_aS$ -,  $R_aS$ (O)-,  $R_aSO_2$ -,  $R_aS$ alkyl-,  $R_a$ (O)Salkyl-,  $R_aSO_2$ alkyl-,  $R_aOC$ (O)-,  $R_aOC$ (O)alkyl-,  $R_aC$ (O)-, and  $R_aC$ (O)alkyl-, wherein each  $R_k$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR\_c), -(alkyl)(NR\_cR\_d), -SR\_c, -S(O)R\_c, -S(O)\_2R\_c, -OR\_c, -N(R\_c)(R\_d), -C(O)R\_c, -C(O)OR\_c, and -C(O)NR\_cR\_d;

m is 0, 1, 2, 3, or 4; and n is 0, 1, or 2.

- 53. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 52, wherein  $R^2$  and  $R^3$ , together with the carbon atoms to which they are attached, form a five- or six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl and heterocycle, wherein said aryl, cycloalkyl, heteroaryl, and heterocycle is optionally substituted with  $(R^6)_m$ .
- 54. (currently amended) The compound, salt, stereoisomer, or tautomer of claim 53, wherein R<sup>2</sup> and R<sup>3</sup>, together with the carbon atoms to which they are attached, form a five- or six-membered ring selected from the group consisting of phenyl, pyridyl, pyridazinyl, pyrimidinyl, pyrazolyl, cyclopentyl, cyclohexyl, and thienyl.
- 55. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 54, wherein R<sup>4</sup> is hydroxy.
- 56. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 55, wherein the compound is selected from the group consisting of:
- 3-(1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl)-4-hydroxy-1-(isobutylamino) quinolin-2(1H)-one;
- 3-[8-(chloromethyl)-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;
- 3-{3-[4-hydroxy-1-(isobutylamino)-2-oxo-1,2-dihydroquinolin-3-yl]-1,1-dioxido-4H-[1,3] oxazolo[5,4-h][1,2,4]benzothiadiazin-8-yl}propanoic acid;
- 3-(8-{[(2-aminoethyl)amino]methyl}-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl)-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;
- methyl {3-[4-hydroxy-1-(isobutylamino)-2-oxo-1,2-dihydroquinolin-3-yl]-1,1-dioxido-4H-[1,3] oxazolo[5,4-h][1,2,4]benzothiadiazin-8-yl}acetate;
- 4-hydroxy-3-(8-{[(3R)-3-hydroxypyrrolidin-1-yl]methyl}-1,1-dioxido-4H-[1,3]oxazolo[5,4-h] [1,2,4]benzothiadiazin-3-yl)-1-(isobutylamino)quinolin-2(1H)-one;
- 3-[1,1-dioxido-8-(pyridinium-1-ylmethyl)-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-1-(isobutylamino)-2-oxo-1,2-dihydroquinolin-4-olate;
- 3-[1,1-dioxido-8-(pyrrolidin-1-ylmethyl)-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;
- 3-[8-(3-aminophenyl)-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;
  - 3-[8-(aminomethyl)-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-

1-(isobutylamino)quinolin-2(1H)-one;

4-hydroxy-3-[8-(hydroxymethyl)-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl] -1-(isobutylamino)quinolin-2(1H)-one;

3-{8-[(butylamino)methyl]-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4]benzothiadiazin-3-yl}-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

3-[9-(butylamino)-1,1-dioxido-4H,8H-[1,4]oxazino[2,3-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(isobutylamino)quinolin-2(1H)-one;

4-hydroxy-1-(3-methylbutyl)-3-(8-methyl-1,1-dioxido-4H-[1,3]oxazolo[5,4-h][1,2,4] benzothiadiazin-3-yl)-1,8-naphthyridin-2(1H)-one;

3-[1,1-dioxido-8-(trifluoromethyl)-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one;

4-hydroxy-3-(8-hydroxy-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl)-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one;

4-hydroxy-1-(3-methylbutyl)-3-(8-methyl-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4] benzothiadiazin-3-yl)-1,8-naphthyridin-2(1H)-one;

3-[1,1-dioxido-8-(pentafluoroethyl)-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one;

3-[8-(chloromethyl)-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl]-4-hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one;

{3-[4-hydroxy-1-(3-methylbutyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-3-yl]-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-8-yl}acetonitrile;

methyl {3-[4-hydroxy-1-(3-methylbutyl)-2-oxo-1,2-dihydro-1,8-naphthyridin-3-yl]-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-8-yl}acetate;

 $3-(9,9-\text{dioxido}-6H-[1,2,5]\text{thiadiazolo}[3,4-h][1,2,4]\text{benzothiadiazin-7-yl}-4-\text{hydroxy-1-(3-methylbutyl}-1,8-naphthyridin-2(1H)-one;}$ 

3-(8-amino-1,1-dioxido-4,7-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl)-4-hydroxy-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one; and

4-hydroxy-3-[8-(hydroxymethyl)-1,1-dioxido-4,9-dihydroimidazo[4,5-h][1,2,4]benzothiadiazin-3-yl]-1-(3-methylbutyl)-1,8-naphthyridin-2(1H)-one.

57. (currently amended) A compound or a pharmaceutically acceptable salt form, stereoisomer, or tautomer thereof, wherein the compound is selected from the group consisting of:

 $N-\{3-[1-(cyclobutylamino)-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl]-1,1-dioxido-4<math>H$ -1,2,4-benzothiadiazin-7-yl} methanesulfonamide:

N-[(3-{1-[(cyclopropylmethyl)amino|-4-hydroxy-2-oxo-1,2-dihydroquinolin-3-yl}-1,1-dioxido-4H-thieno[2,3-e][1,2,4]thiadiazin-7-yl)methyl]methanesulfonamide;

N-(3-{1-[(cyclopropylmethyl)amino]-4-hydroxy-2-oxo-1,2-dihydro-3-quinolinyl}-1,1-dioxido-4H-1,2,4-benzothiadiazin-7-yl)methanesulfonamide;

N-{3-[1-(cyclobutylamino)-4-hydroxy-2-oxo-1,2-dihydro-3-quinolinyl]-1,1-dioxido-4H-1,2,4-benzothiadiazin-7-yl}sulfamide; and

N-{3-[1-(cyclobutylamino)-4-hydroxy-2-oxo-1,2-dihydro-3-quinolinyl]-1,1-dioxido-4H-1,2,4-benzothiadiazin-7-yl}-N'-methylsulfamide, or a pharmaceutically acceptable salt, stereoisomer or tautomer thereof.

58-61. (canceled)

- 62. (currently amended) A pharmaceutical composition comprising a therapeutically effective amount of one or more compounds, salts, stereoisomers, or tautomers recited in <u>claim</u> any one of claims 25, 30, 33, 52, 57, 58, 59, 60, 61, and 90 and a pharmaceutically acceptable carrier.
- 63. (previously presented) The pharmaceutical composition of claim 62, wherein the composition further comprises one or more agents selected from the group consisting of a host immune modulator and a second antiviral agent.
- 64. (previously presented) The pharmaceutical composition of claim 63, wherein each of the one or more host immune modulators is selected from the group consisting of interferon-alpha, pegylated-interferon-alpha, interferon-beta, interferon-gamma, a cytokine, and a vaccine optionally comprising an antigen and an adjuvant.
- 65. (previously presented) The pharmaceutical composition of claim 63, wherein the second antiviral agent inhibits replication of HCV by inhibiting host cellular functions associated with viral replication.
- 66. (previously presented) The pharmaceutical composition of claim 63, wherein the second antiviral agent inhibits the replication of HCV by targeting proteins of the viral genome.
- 67. (previously presented) The pharmaceutical composition of claim 62, wherein the composition further comprises an agent or combination of agents that treat or alleviate symptoms of HCV infection.

- 68. (previously presented) The pharmaceutical composition of claim 62, wherein the composition further comprises one or more agents that treat patients for disease caused by hepatitis B (HBV) infection.
- 69. (previously presented) The pharmaceutical composition of claim 68, wherein each of the one or more agents that treat patients for disease caused by hepatitis B (HBV) infection is selected from the group consisting of L-deoxythymidine, adefovir, lamivudine, and tenfovir.
- 70. (previously presented) The pharmaceutical composition of claim 62, wherein the composition further comprises one or more agents that treat patients for disease caused by human immunodeficiency virus (HIV) infection.
- 71. (currently amended) The pharmaceutical composition of claim 70, wherein each of the one or more agents that treat patients for disease caused by human immunodeficiency virus (HIV) infection is selected from the group consisting of ritonavir, lopinavir, indinavir, nelfinavir, saquinavir, amprenavir, atazanavir, tipranavir, TMC-114, fosamprenavir, zidovudine, lamivudine, didanosine, stavudine, tenofovir, zalcitabine, abacavir, efavirenz, nevirapine, delavirdine, TMC-125, L-870812, S-1360, enfuvirtide (T-20), and T-1249.
- 72. (withdrawn & currently amended) A method of treating or preventing infection caused by an RNA-containing virus, wherein the method comprises comprising administering to a patient in need of such treatment or prevention a pharmaceutical composition recited in claim of any one of claims 62, 63, 64, 65, 66, 67, 68, 69, 70 and 71.
- 73. (withdrawn & currently amended) A method of inhibiting the replication of an RNA-containing virus, wherein the method comprises comprising contacting [[said]] the virus with a therapeuctially effective amount of a compound or combination of one or more compounds, salts, stereoisomers, or tautomers recited in claim of any one of claims 1, 57,58,59,60 and 61.
- 74. (withdrawn & currently amended) A method of treating or preventing infection caused by an RNA-containing virus, wherein the method comprises comprising administering to a patient in need of such treatment or prevention a therapeutically effective amount of a compound or combination of one or more compounds, salts, stereoisomers, or tautomers recited in claim of any one of claims 1, 57,58,59,60 and 61.

75. (withdrawn & currently amended) The method of claim 72, wherein the RNA-containing virus is hepatitis C virus.

76-89. (canceled)

90. (currently amended) A compound, or a pharmaceutically acceptable salt, stereoisomer, or tautomer thereof, wherein:

the compound corresponds in structure to formula (I):

A is a monocyclic or bicyclic ring selected from the group consisting of aryl, cycloalkyl, cycloalkenyl, heteroaryl, and heterocycle;

 $R^{1}$  is  $R_{a}R_{b}N_{-}$ ;

R<sup>2</sup> and R<sup>3</sup>, together with the carbon atoms to which they are attached, form a five- or six-membered ring selected from the group consisting of aryl, cycloalkyl, heteroaryl, and heterocycle;

# R<sup>4</sup> is selected from the group consisting of alkoxy, arylalkoxy, arvloxy, halo, hydroxy, R<sub>2</sub>R<sub>2</sub>N<sub>2</sub>, N<sub>3</sub>-, and R<sub>2</sub>S-, wherein R<sup>4</sup> is substituted with 0, 1, or 2 substituents independently selected from the group consisting of halo, nitro, cyano, -OH, -NH<sub>2</sub>, and -COOH;

 $R^5$  is independently selected at each occurrence from the group consisting of alkenyl, alkoxy, alkyl, alkynyl, aryl, arylalkyl, arylcarbonyl, aryloxy, azidoalkyl, formyl, halo, haloalkyl, halocarbonyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, hydoxyalkyl, cycloalkyl, cyano, cyanoalkyl, nitro,  $R_aR_bN$ -,  $R_aC(O)$ -,  $R_aS$ -,  $R_a(O)S$ -,  $R_a(O)_2S$ -,  $R_aR_bNalkyl$ -,  $R_a(O)SN(R_f)$ -,  $R_aSO_2N(R_f)$ -,  $R_aSO_2N(R_f)$ -,  $R_aC(O)$ -,  $R_a$ 

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen,

alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkylalkyl, cycloalkylalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, and nitroalkyl;

 $R_c$  and  $R_d$ , at each occurrence, are independently selected from the group consisting of hydrogen, -NR<sub>f</sub>R<sub>h</sub>, -OR<sub>f</sub>, -CO(R<sub>f</sub>), -SR<sub>f</sub>, -SO<sub>2</sub>R<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -C(O)OR<sub>f</sub>, alkenyl, alkyl, alkynyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, aryl, arylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, and heterocycloalkyl, wherein each  $R_c$  and  $R_d$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)R<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)R<sub>f</sub>, -C(O)OR<sub>f</sub>, -C(O)NR<sub>f</sub>R<sub>h</sub>, -C(O)N(H)NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>c</sub>)C(O)OR<sub>f</sub>, -N(R<sub>c</sub>)SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, -N(R<sub>c</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>, -alkylN(R<sub>c</sub>)C(O)OR<sub>f</sub>, -alkylN(R<sub>c</sub>)SO<sub>2</sub>NR<sub>f</sub>R<sub>h</sub>, and -alkylN(R<sub>c</sub>)C(O)NR<sub>f</sub>R<sub>h</sub>;

alternatively,  $R_c$  and  $R_d$ , together with the nitrogen atom to which they are attached, form a three-to six-membered ring selected from the group consisting of heteroaryl and heterocycle, wherein the heteroaryl and heterocycle are independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)(OR<sub>f</sub>), -(alkyl)(NR<sub>f</sub>R<sub>h</sub>), -SR<sub>f</sub>, -S(O)R<sub>f</sub>, -S(O)<sub>2</sub>R<sub>f</sub>, -OR<sub>f</sub>, -N(R<sub>f</sub>)(R<sub>h</sub>), -C(O)OR<sub>f</sub>, and -C(O)NR<sub>f</sub>R<sub>h</sub>;

Re is selected from the group consisting of hydrogen, alkenyl, alkyl, and cycloalkyl;

 $R_f$  and  $R_h$ , at each occurrence, are independently selected from the group consisting of hydrogen, alkyl, alkenyl, arylalkyl, cycloalkyl, cycloalkylalkyl, cycloalkenyl, cycloalkenylalkyl, heterocycle, heterocyclealkyl, heteroaryl, and heteroarylalkyl, wherein each  $R_f$ ,  $R_g$ , and  $R_h$  is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl, cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylalkyl, -OH, -O(alkyl), -N(H)(alkyl),  $-N(alkyl)_2$ , -S(alkyl), -S(O)(alkyl),  $-SO_2alkyl$ , -alkyl-OH, -alkyl-O-alkyl, -alkylN(H)(alkyl),  $-alkylN(alkyl)_2$ , -alkylS(alkyl), -alkylS(O)(alkyl),  $-alkylSO_2alkyl$ ,  $-N(H)C(O)NH_2$ , -C(O)OH, -C(O)O(alkyl), -C(O)alkyl,  $-C(O)NH_2$ ,  $-C(O)NH_2$ , -C(O)N(H)(alkyl), and  $-C(O)N(alkyl)_2$ ;

alternatively, R<sub>f</sub> and R<sub>h</sub>, together with the nitrogen atom to which they are attached, form a three-to seven-membered ring selected from the group consisting of heterocycle and heteroaryl, wherein each of the heterocycle and heteroaryl is independently substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, cyano, halo, oxo, nitro, aryl, arylalkyl,

cycloalkyl, cycloalkenyl, heterocycle, heteroaryl, heteroarylaikyl, –OH, -O(alkyl), -NH<sub>2</sub>, -N(H)(alkyl), -N(alkyl), -S(alkyl), -S(alkyl), -S(O)(alkyl), -alkyl-OH, -alkyl-O-alkyl, -alkylNH<sub>2</sub>, -alkylN(H)(alkyl), -alkylS(alkyl), -alkylS(O)(alkyl), -alkylSO<sub>2</sub>alkyl, -alkylN(alkyl)<sub>2</sub>, -N(H)C(O)NH<sub>2</sub>, -C(O)OH, -C(O)O(alkyl), -C(O)NH<sub>2</sub>, -C(O)NH<sub>2</sub>, -C(O)N(H)(alkyl), and -C(O)N(alkyl)<sub>2</sub>;

 $R_k$  is selected from the group consisting of hydrogen, alkenyl, alkyl, aryl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkyl, cycloalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkyl, heterocycle, heterocyclealkyl, nitroalkyl,  $R_aR_bNalkyl$ -,  $R_aOalkyl$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aR_bNC(O)$ -,  $R_aSO_2$ -,  $R_aSalkyl$ -,  $R_a(O)$ -Salkyl-,  $R_aSO_2$ alkyl-,  $R_aOC(O)$ -,  $R_aOC(O)$ -, and  $R_aC(O)$ -alkyl-, wherein each  $R_k$  is substituted with 0, 1, 2, or 3 substituents independently selected from the group consisting of alkyl, alkenyl, alkynyl, oxo, halo, cyano, nitro, haloalkyl, haloalkoxy, aryl, heteroaryl, heterocycle, arylalkyl, heteroarylalkyl, alkoxyalkoxyalkyl, -(alkyl)( $OR_c$ ), -(alkyl)( $OR_c$ ), -(alkyl)( $OR_c$ ), -S(O) $OR_c$ , -S(O) $OR_c$ , -ORC, -ORC, -N( $OR_c$ )( $OR_c$ ), -C( $OR_c$ ) and -C( $OR_c$ ) and

n is 0, 1, 2, 3, or 4.

91. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 25, wherein: R<sup>5</sup> is R<sub>3</sub>SO<sub>2</sub>N(R<sub>t</sub>)alkyl-, and

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkylalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, and nitroalkyl.

92. (previously presented) The compound, salt, stereoisomer, or tautomer of claim 25, wherein:  $R^1$  is  $R_aR_bN$ -, and

R<sub>a</sub> and R<sub>b</sub>, at each occurrence, are independently selected from the group consisting of hydrogen, alkenyl, alkyl, alkylsulfanylalkyl, aryl, arylalkenyl, arylalkyl, cyanoalkyl, cycloalkenyl, cycloalkylalkyl, cycloalkylalkyl, formylalkyl, haloalkyl, heteroaryl, heteroarylalkenyl, heteroarylalkyl, heterocycle, heterocyclealkenyl, heterocyclealkyl, hydroxyalkylcarbonyl, and nitroalkyl.

93. (new) A method of treating or preventing infection caused by a hepatitis C virus, wherein the method comprises administering to a patient in need of such treatment or prevention a therapeutically effective amount of one or more compounds, salts, stereoisomers, or tautomers recited in claim 25.

- 94. (new) A method of treating or preventing infection caused by a hepatitis C virus, wherein the method comprises administering to a patient in need of such treatment or prevention a therapeutically effective amount of one or more compounds, salts, stereoisomers, or tautomers recited in claim 30.
- 95. (new) A method of treating or preventing infection caused by a hepatitis C virus, wherein the method comprises administering to a patient in need of such treatment or prevention a therapeutically effective amount of one or more compounds, salts, stereoisomers, or tautomers recited in claim 33.
- 96. (new) A method of treating or preventing infection caused by a hepatitis C virus, wherein the method comprises administering to a patient in need of such treatment or prevention a therapeutically effective amount of one or more compounds, salts, stereoisomers, or tautomers recited in claim 52.
- 97. (new) A method of treating or preventing infection caused by a hepatitis C virus, wherein the method comprises administering to a patient in need of such treatment or prevention a therapeutically effective amount of one or more compounds, salts, stereoisomers, or tautomers recited in claim 90.